

Amendments to the Claims:

Please cancel claims 1-15 as presented in the underlying International Application No. PCT/DE03/00661.

Please add new claims 15-31 as indicated in the listing of claims below.

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-14 (canceled)

Claim 15 (new): A process for producing a dimensionally accurate component from a nonferrous metal alloy, the process comprising:

providing a casting mold corresponding to an external shape of the component and associated with an outlet opening, wherein the casting mold includes at least one heated mold shell;

providing a heated, rotatably mounted runner device for receiving a melt of the nonferrous metal alloy;

determining a three-dimensional setting angle for the casting mold with respect to the outlet opening based on acceleration forces on the melt, wherein the acceleration forces include centrifugal forces applied to the melt and Coriolis forces of the centrifugal forces;

disposing the casting mold at the three-dimensional setting angle with respect to the outlet opening; and

feeding a melt into the mold through the outlet opening using the runner device so as to completely fill the casting mold.

Claim 16 (new): The process as recited in claim 15, wherein the dimensionally accurate component is for a turbine engine.

Claim 17 (new): The process as recited in claim 15, further comprising diverting the melt in the runner device through approximately 30° to 180° counter to the direction of a gravitational force using the centrifugal forces, and wherein the feeding of the melt is performed so as to homogeneously fill the casting melt using the acceleration forces,

including the Coriolis forces.

Claim 18 (new): The process as recited in claim 15, further comprising holding at least one of the heated, rotatably mounted runner device and the heated mold shell at a predetermined process temperature so as to maintain the ability of the nonferrous metal alloy to flow.

Claim 19 (new): The process as recited in claim 18, wherein the predetermined process temperature is from 10° to 200°C above a melting point of the nonferrous metal alloy.

Claim 20 (new): The process as recited in claim 15, further comprising melting the nonferrous metal alloy so as to produce the melt outside of the runner device.

Claim 21 (new): The process as recited in claim 15, further comprising heating the component 100°C to 900°C while the component is still in the casting mold so as to perform a controlled lowering of a cooling rate of the component.

Claim 22 (new): An apparatus for producing a dimensionally accurate component from a nonferrous metal alloy, the apparatus comprising:

- a vertically positioned, rotatably mounted, heatable cup-like vessel for receiving the nonferrous metal alloy, the vessel including lateral side wall and a base surface shaped to direct a flow of a melt of the nonferrous alloy;

- a heatable casting mold disposed at the side wall at a predetermined distance from the base surface and communicating with the vessel through an outlet opening, the casting mold including at least one mold shell and being oriented at a three-dimensional setting angle with respect to the outlet opening, wherein the setting angle is adjustable so as to enable the casting mold to be filled with the melt homogeneously and without flow detachment in the melt.

Claim 23 (new): The apparatus as recited in claim 22, wherein the vessel includes a closable cover, is mounted rotatably relative to the casting mold and is configured to receive an ingot of the nonferrous metal alloy corresponding to an internal diameter of the vessel.

Claim 24 (new): The apparatus as recited in claim 23, further comprising a distributor with a nozzle action disposed inside the vessel and associated with the outlet opening, and wherein

the casting mold is disposed in a region of an upper edge of the vessel.

Claim 25 (new): The apparatus as recited in claim 22, wherein the vessel and the casting mold include a ceramic material that is relatively unreactive with respect to the melt and that has included metal particles.

Claim 26 (new): The apparatus as recited in claim 22, further comprising a runner channel configured to supply the melt to the vessel, the runner channel including a ceramic material that is relatively unreactive with respect to the melt and that has included metal particles.

Claim 27 (new): The apparatus as recited in claim 22, wherein the vessel and the casting mold include at least one of coated steel, coated graphite, tantalum, titanium and niobium.

Claim 28 (new): The apparatus as recited in claim 22, wherein the vessel and the casting mold are heated using at least one of an inductive and a microwave heating.

Claim 29 (new): A nonferrous metal alloy for carrying out the process as recited in claim 15, based on a TiAl metal alloy and comprising 30 to 33% by weight of Al, 4 to 6% by weight of Nb, 0.5 to 3% by weight of Mn and 0.1 to 0.5% by weight of B, with the remainder being Ti.

Claim 30 (new): The nonferrous metal alloy as recited in claim 29, having an oxygen content of from 0 to 2000 ppm, a carbon content of from 0 to 2000 ppm, an Ni content of 100 to 2000 ppm and an N content of 0 to 2000 ppm.

Claim 31 (new): The nonferrous metal alloy as recited in claim 30, wherein the Ni content is 800 to 1200 ppm.